BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

	Estimate Cost Rs.	**9900000.00**

Name of Work: Improvements of Roads And Drains At Lal Bahadur Shastri Slum And Surrounding Area In Ward No.04

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 (Page No-140 Item no - 18.47 of KPWD SR 2018-19)								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	1.00	0.15	130.20		
		Cum					**130.20**	**952.94**	**124072.79**
	Basic Rate	899.00							
	Area Weightage 6%	53.94							
	Grand Total	**952.94**							
2	KSRRB 300-3. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. (Page No. 142/ Item No. 19.1/ PWD SR 2018-19)								
	Desilt								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	0.60	0.50	260.40		
	For CC Road								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	1.00	0.30	260.40		
	for Asphalt road								
	Near NES Office Lal Bahadduru Shastri main Road		2	59.00	2.00	0.30	70.80		
			2	441.00	2.00	0.30	529.20		
	Towards Allal Sandra Lake		2	112.00	2.00	0.30	134.40		
		Cum					**1255.20**	**137.80**	**172966.56**
	Basic Rate	130.00							
	Area Weightage 6%	7.80							
	Grand Total	**137.80**							
3	KSRB 100-1 Loading and unloading ofstone aggregates / sand/ kanker/ Moorum /soil KSRRB M100-1 Placing tipper at loading with front end loader dumpting turning for return trip excluding time for haulged and return trip complete as per specification item No 17.1 page 130 and KSRB M.100.4.1 costof haulage excluding loading and unloading MORTH to a distance of 4.00 K.M (Item No 17.4 Page 134 (SR 2018-19)								
		Cum	**Vide Item No. 1**				**1255.20**	**82.13**	**103088.07**
	Basic Rate for loading and unloading	57.00							
	Basic Rate for Haulage upto 8.00 k.m =1.28 X 2.50 X 8	20.48							
	Basic Rate	77.48							
	Area Weightage 6%	4.65							
	Grand Total	**82.13**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
4	Removing And Refixing stone slabs of drains and pointing in C.M (1:3) (Page No.27/ Item No.5.33/ PWD SR 2018-19)								
	Removing And Refixing Slabs								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	0.90		781.20		
		Consider 15% of missing slab					131.00		
		Sqm					**650.20**	**111.30**	**72367.26**
	Basic Rate	105.00							
	Area Weightage 6%	6.30							
	Grand Total	**111.30**							
5	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.13, I.No. 4.6 of PWD SR 2018-19)								
	Coping								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	0.15	0.10	13.02		
		Cum					**13.02**	**5747.32**	**74830.11**
	Basic Rate	5422.00							
	Area Weightage 6%	325.32							
	Grand Total	**5747.32**							
6	Providing and Fixing **pre cast covering Slab** made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	New Precast Slabs								
	Lal Bahadduru Shastri Area								
				New Precast Slabs			131.00		
		Sqm					**131.00**	**2337.00**	**306147.00**
	Data Rate	**2337.00**							
7	KSRRB 300-Compaction KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications.(P.No. 147, I.No. 19.64)								
	For CC Road								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	1.00		868.00		
	for Asphalt road								
	Near NES Office Lal Bahadduru Shastri main Road		2	59.00	2.00		236.00		
			2	441.00	2.00		1764.00		
	Towards Allal Sandra Lake		2	112.00	2.00		448.00		
		Sqm					**3316.00**	**6.36**	**21089.76**
	Basic Rate	6.00							
	Area Weightage 6%	0.36							
	Data Rate	**6.36**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
8	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 (Page No-158 Item no - 20.18 of KPWD SR 2018-19).								
	For CC Road								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	1.00	0.15	130.20		
	for Asphalt road								
	Near NES Office Lal Bahadduru Shastri main Road		2	59.00	2.00	0.20	47.20		
			2	441.00	2.00	0.20	352.80		
	Towards Allal Sandra Lake		2	112.00	2.00	0.20	89.60		
		Cum					**619.80**	**2001.28**	**1240393.34**
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Grand Total	**2001.28**							
9	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. (P.No-222,I No-27.18)								
	For CC Road								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		2	434.00	1.00	0.15	130.20		
		Cum					**130.20**	**5421.90**	**705931.38**
	Basic Rate	5115.00							
	Area Weightage 6%	306.90							
	Grand Total	**5421.90**							
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) (Page No. 175.tem No.22.6.1,PW,P & IWTD SR 2018-19)								
	For CC Road								
	Lal Bahadduru Shastri Area								
	Vinayaka Temple Road		1	434.00	4.00	0.15	260.40		
		Cum					**260.40**	**5210.96**	**1356933.98**
	Basic Rate	4916.00							
	Area Weightage 6%	294.96							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Grand Total	**5210.96**							
11	Vaccum de-watering with **vaccum pump** and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.								
	For CC Road								
	Lal Bahadduru Shastri Area								
	Cross Road-1		1	434.00	4.00	0.15	260.40		
							260.40	**72.08**	**18769.63**
	Basic Rate	68.00							
	Area Weightage 6%	4.08							
	Grand Total	**72.08**							
12	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg I sqm using mechanical means complete as per specifications.MORTH Specification No. 502 (Page No-161 Item no 21.6 of KPWD SR 2018-19)								
	Near NES Office Lal Bahadduru Shastri main Road		2	59.00	2.00		236.00		
			2	441.00	2.00		1764.00		
	Towards Allal Sandra Lake		2	112.00	2.00		448.00		
		Sqm					**2448.00**	**36.04**	**88225.92**
	Basic Rate	34.00							
	Area Weightage 6%	2.04							
	Grand Total	**36.04**							
13	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 (Page No-161 Item no - 21.2 of KPWD SR 2018-19).								
	Near NES Office Lal Bahadduru Shastri main Road								
			1	59.00	14.00		826.00		
			1	441.00	12.50		5512.50		
	Towards Allal Sandra Lake		1	112.00	15.50		1736.00		
		Sqm					**8074.50**	**5.30**	**42794.85**
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							
14	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (Page No-160 Item no - 21.17.6 of KPWD SR 2018-19)								
	Near NES Office Lal Bahadduru Shastri main Road		2	59.00	2.00	0.05	11.80		
			2	441.00	2.00	0.05	88.20		
	Towards Allal Sandra Lake		2	112.00	2.00	0.05	22.40		
		Cum					**122.40**	**7721.04**	**945055.30**
	Basic Rate	7284.00							
	Area Weightage 6%	437.04							
	Grand Total	**7721.04**							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
15	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH (Page No-161 Item no - 21.7 of KPWD SR 2018-19).								
	Near NES Office Lal Bahadduru Shastri main Road		1	59.00	14.00		826.00		
			1	441.00	12.50		5512.50		
	Towards Allal Sandra Lake		1	112.00	15.50		1736.00		
		Sqm					**8074.50**	**14.84**	**119825.58**
	Basic Rate	14.00							
	Area Weightage 6%	0.84							
	Grand Total	**14.84**							
16	KSRRB M500-19. Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 40 mm) with 5.4 % VG-30 BitumenItem No.21.22.6)(P.No.162 & I.No.21.22.6 PWD 18-19)								
	Near NES Office Lal Bahadduru Shastri main Road		1	59.00	14.00	0.04	33.04		
			1	441.00	12.50	0.04	220.50		
	Towards Allal Sandra Lake		1	112.00	15.50	0.04	69.44		
		Cum					**322.98**	**8980.32**	**2900463.75**
	Basic Rate	8472.00							
	Area Weightage 6%	508.32							
	Grand Total	**8980.32**							
17	KSRRB M800-13: Road marking with hot applied thermoplastic compound with reflect rising glass beads on bituminous surface- providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface to level, uniform and free from streaks and holes complete as per specifications. MORTH specification No. 803, No. 1974 (P.No.185 & I.No.24.15 PWD 18-19)								
	Road Marking								
	Near NES Office Lal Bahadduru Shastri main Road								
			4	59.00	0.15		35.40		
			4	441.00	0.15		264.60		
	Towards Allal Sandra Lake		4	112.00	0.15		67.20		
		Sqm					**367.20**	**454.74**	**166980.53**
	Basic Rate	429.00							
	Area Weightage 6%	25.74							
	Grand Total	**454.74**							
								Total Construction Cost	**8459935.81**
								GST Charges 12%	**1015192.30**
								KRIDL service charges 4%	**338397.43**
								Towards PMC Cost	**84599.36**
								Sub Total	**9898124.90**

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
								Miscellaneous charges	1875.10
								Total	9900000.00
	(Rupees Ninety Nine Lakhs Only)								

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D of 2018-19
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer
Ward No.04

Executive Engineer
Yelahanka Division
Bangalore-64

Assistant Executive Engineer
Yelahanka Satellite town Sub Division
Bangalore-64

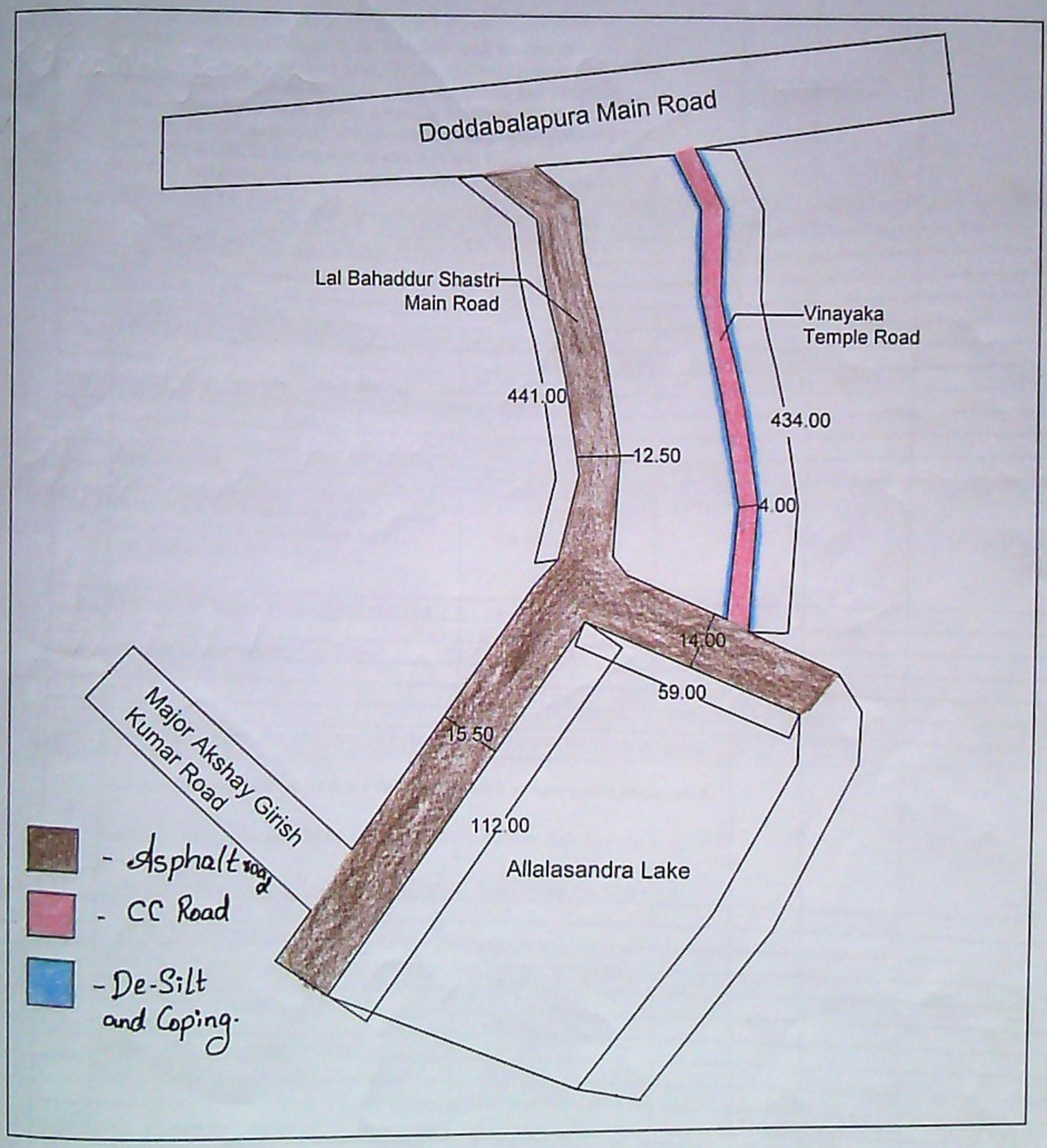
Administrative Sanction for Rs. 99.00 Lakhs
Ninety nine Lakhs only
is accorded under head P-1878
18 per works 2018-19
Registered as CE No. ..... Subject to conditions contained in enclosed memo No EE/YNK/AS/20/2019-20 Dt. 19/10/2019

Executive Engineer

Technical Sanction
Accorded For RSS Scheduled only
Head of A/C P1878
CER NO : 92 Dt: 23.10.2019

TA CE (YNK)

Name of Work: Improvements Of Roads and Drains at Lal Bahadhur Shashtri Slum and Surrounding Area in Ward no.04



Ramanjeevaiah

ASSISTANT ENGINEER
Ward No.04

ASST EXECUTIVE ENGINEER
Yelahanka satellite Town Sub Division